MULTIMEDIA UNIVERSITY

STUDENT ID NO

MULTIMEDIA UNIVERSITY

FINAL EXAMINATION

TRIMESTER 2, 2020/2021

BAC1624 – MANAGEMENT ACCOUNTING 1

(All sections / Groups)

10 MARCH 2021
9.00AM – 12.00PM
(3 Hours)

INSTRUCTIONS TO STUDENT

1. This Question paper consists 9 pages (excluding the cover page) with **FIVE** questions only.

2. Answer **ALL** questions. The distribution of the marks for each question is given.

3. Please write all your answers in the Answer Sheet provided.

QUESTION 1

Mariana Company processes industrial steel cables. The company uses a *First-in-First-Out (FIFO) inventory* system to cost its production. For the last quarter of 2020 (October to December), the company had the following production data for its Galvanising Workshop:

	Physical Units (ropes)	**Percentage of Completion (%)**	
		Materials	**Conversion Costs**
Work-in-Process, 01 October	500,000	100%	95%
Completed and transferred out during Quarter 4	2,000,000	100%	100%
Work-in-Process, 31 December	300,000	100%	80%

All ropes are added at the beginning of the galvanising process. Labour and overheads are typically incurred uniformly throughout the galvanising process. Available costs information are as follows:

	Material	**Conversion Cost**
Work-in-Process, 01 October	RM6,750,000	RM10,000,000
Started into production during Quarter 4	RM27,000,000	RM35,300,000

All galvanised ropes are transferred to Stranding Workshop when completed.

Continued…

Required:

a) Determine the equivalent units of production with respect to:

(i) direct materials, and

(ii) conversion costs,

for the last quarter of 2020.

(6 marks)

b) What is the total equivalent unit cost for the last quarter of 2020?

(2 marks)

c) Prepare a **cost reconciliation schedule** for the last quarter for 2020.

Show ALL workings and the necessary total costs.

(8 marks)

d) Journalise the transfer of the completed (galvanised) ropes to the Stranding Workshop.

(2 marks)

e) Is the First-in-First-Out (FIFO) method more superior to the weighted-average (WA) method of process costing?

(2 marks)

[TOTAL 20 MARKS]

Continued….

QUESTION 2

Teguh Electronics Sdn. Bhd. (TESB) produces two oven models:

X-200	Year 2020 new model (priced at RM900)
X-100	Year 2010 old model (priced at RM1,140)

The company currently uses a *traditional costing method* which would aggregate the direct material costs, direct labour costs, machine usage costs and manufacturing overhead costs as part of the products' total manufacturing costs. Direct labour cost is at RM12 per hour and machine usage cost is at RM18 per hour. Estimated manufacturing overhead cost is RM4,800,000 and allocated on the basis of machine hours.

The CEO suggested for the company to concentrate marketing efforts on the *X-200* model and to begin phasing out the *X-100* model. The CEO would like to have an *activity-based costing (ABC) analysis* to be carried out before making any decisions.

The following production and cost data are available for analysis:

PER UNIT Data	**X-200**	**X-100**
Direct Material Costs	RM208	RM584
Direct Labour Hours	1.5 DLH	3.5 DLH
Machine Hours	8.0 MH	4.0 MH

	X-200	**X-100**
Units Produced	22,000	4,000

Activity Cost Pool	**Overhead Cost (RM)**	**Cost Drivers**	**Oven Models**	
			X-200	**X-100**
Soldering	942,000	No. of solder joints	1,185,000	385,000
Shipment	860,000	No. of shipments	16,200	3,800
Quality Control	1,240,000	No. of inspections	56,200	21,300
Purchase Orders	950,400	No. of orders	80,100	109,980
Machining	57,600	Machine hours	176,000	16,000
Machine set-ups	750,000	No. of set-ups	16,000	14,000

Selling and general administrative expenses per unit sold are RM265 for X-200 and RM244.50 for X-100 respectively.

Continued….

Required:

a) Calculate the manufacturing cost per unit for each oven model under the present traditional cost accounting system.

(5 marks)

b) Calculate the manufacturing cost per unit for each oven model using the proposed activity-based costing (ABC) method.

Round all costs to two decimal places.

(13 marks)

c) Should TESB concentrates its marketing effort on X-200 or X-100?

Justify your decision with the **net operating profit (net income) per unit** for each oven under the ABC method.

Show ALL workings.

(2 marks)

[TOTAL 20 MARKS]

Continued…

QUESTION 3

Rocky Cafe Sdn. Bhd. is a restaurant specialising in fusion food. The following menu lists the food options that are available in the restaurant on a daily basis:

	Selling Price (RM)
Chicken Chop	25
Spaghetti Goreng	20
Big Sarapan	25
Spinach Pancakes	20
Toasty Rotis	10

The restaurant manager provided the following data for February 2020:

	Sales Units	**Unit Variable Costs (RM)**	**Required DLH (per units sold)**
Chicken Chop	250	8	0.35
Spaghetti Goreng	200	6	0.3
Big Sarapan	150	10	0.5
Spinach Pancakes	100	5	0.25
Toasty Rotis	300	3	0.15

Annual fixed costs for the restaurant are at RM132,000.

Rocky, the owner, would like to earn (target net income) RM30,000 for April 2021.

The restaurant is currently operating on a limited resources of direct labour hours available for its kitchen area.

Continued…

Required:

a) Determine the current *weighted-average contribution margin* (in Ringgit Malaysia) of Rocky Cafe Sdn. Bhd. for February 2020.

(11 marks)

b) What is the *required sales* (in units) for the restaurant to achieve the target net income of RM30,000 in April 2021?

Show ALL workings for required sales in TOTAL <u>and</u> by the OPTIONS available. Round your answers to the nearest unit.

(6 marks)

c) Rocky is planning to hire an additional kitchen assistant to help his restaurant achieve his required sales target. The new kitchen assistant is expected to begin work in April 2021. Rocky would like to assign this new assistant to help with the Chicken Chop option.

(i) Is Rocky's decision reasonable?

(ii) Which food option is more justified to receive the extra help?

*Show <u>relevant</u> workings on the **contribution margin with limited resources** to support your answer.*

(3 marks)

[TOTAL 20 MARKS]

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QUESTION 4

Istanbul Trading Berhad produces and sells Turkish lamps. Budgeted information for its product, Tiara, in the first quarter of 2021 are available:

Inventory, 1 January 2021	**6,000 units**
Fixed Manufacturing Overhead	RM14.40 per unit
Variable Cost of Goods Manufactured	RM71.00 per unit
During January:	
Sales	**75,000 units**
Production	**70,000 units**
Fixed Manufacturing Overhead	RM864,000 (based on normal volume: 60,000 units)
Variable Cost of Goods Manufactured	RM71.00 per unit
Variable Selling & Administrative Expense	RM4.70 per unit
Fixed Selling and Administration	RM380,000
Selling Price	RM115 per unit

Required:

a) Determine the net income for the first quarter of 2021 under the:

(i) Absorption costing method

(9 marks)

(ii) Variable costing method

(8 marks)

b) Reconcile the differences between the net income generated under absorption costing method and variable costing method.

(3 marks)

[TOTAL 20 MARKS]

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QUESTION 5

Nura Precision Sdn. Bhd. produces a single product which uses a standard costing system to control its costs. The standard and actual costs data to produce **one unit** of the product for February 2021 is as given:

	STANDARD	**ACTUAL**
Direct Materials		
4.0kg at RM7.20 per kg	RM28.80	
4.4kg at RM6.70 per kg		RM29.48
Direct Labour		
1.6 hours at RM9.00 per hour	RM14.40	
1.4 hours at RM9.70 per hour		RM13.58
Variable Manufacturing Overhead		
1.6 hours at RM3.60 per hour	RM5.76	
1.4 hours at RM4.30 per hour		RM6.02
Total cost per unit	**RM48.96**	**RM49.08**

During February, 4,800 units of product were produced.

The comparison of standard and actual cost on the basis of total cost is given below:

Actual cost (4,800 units x RM49.08)	RM235,584
Standard cost (4,800 units x RM48.96)	RM235,008

The company purchased 21,120 kilograms of materials from its vendors in February. There was no inventory of materials in stock at the start and at the end of month.

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Required:

a) Calculate the following variances:

(i) Material price variance (2 marks)

(ii) Material quantity variance (2 marks)

(iii) Labour price variance (2 marks)

(iv) Labour quantity variance (2 marks)

b) Using the *standard cost accounting system*, journalise the following variances:

(i) Material price variance (3 marks)

(ii) Material quantity variance (3 marks)

(iii) Labour price variance (3 marks)

(iv) Labour quantity variance (3 marks)

[TOTAL 20 MARKS]

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